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10385

Form 504 U. S. DEPARTMENT OF COMMERCE COAST AND GEODETIC SURVEY DESCRIPTIVE REPORT	
* Type of Survey <u>Shoreline (Photogrammetric)</u>	
Field No. <u>Ph-87</u>	Office No. <u>T-10385</u>
LOCALITY State <u>ALASKA</u> General locality <u>El Capitan Passage</u> Locality <u>Tenass Pass to Sarheen Cove</u>	
<u>1953-10-57</u> 1956 **	
CHIEF OF PARTY <u>E. W. Richards, Chief of Field Party</u> <u>William F. Deane, Baltimore District Officer</u>	
LIBRARY & ARCHIVES DATE _____	

COMM-DC 61300

* THIS IS AN "INCOMPLETE" MANUSCRIPT

** REFER TO PAGES 6 AND 6A

DATA RECORD

T -10385

Project No. (II): Ph-87

Quadrangle Name (IV):

Field Office (II): C&GS Ship HODGSON

Chief of Party: E. W. Richards

Photogrammetric Office (III): Baltimore, Md.

Officer-in-Charge: William F. Deane

Instructions dated (II) (III): 7 Nov. 1955

13 Nov. 1956

21 November 1956

Copy filed in Division of
Photogrammetry (IV)

Method of Compilation (III): Graphic

Manuscript Scale (III): 1:10,000

Stereoscopic Plotting Instrument Scale (III):

Scale Factor (III): 1.000

Date received in Washington Office (IV):

Date reported to Nautical Chart Branch (IV):

Applied to Chart No.

Date:

Date registered (IV):

Publication Scale (IV):

Publication date (IV):

Geographic Datum (III): N.A. 1927

Vertical Datum (III): MHW

Mean sea level except as follows:
Elevations shown as (25) refer to mean high water
Elevations shown as (5) refer to sounding datum
i.e., mean low water or mean lower low water

Reference Station (III): TAN, 1922

Lat.: 56° 01' 21.097" (652.5m)

Long.: 133° 15' 34.954" (605.5,)

Adjusted
~~Standard~~

Plane Coordinates (IV):

State: Alaska

Zone: 8

Y=

X=

Roman numerals indicate whether the item is to be entered by (II) Field Party, (III) Photogrammetric Office,
or (IV) Washington Office.

When entering names of personnel on this record give the surname and initials, not initials only.

DATA RECORD

Field Inspection by (II): *CONTROL IDENTIFIED IN 1955 & 1956 (FOR PLOT)* James P. Randall *- NO FIELD INSP. REPORT*
Date: ~~June 1956~~ 1957

Planetable contouring by (II): Date:

Completion Surveys by (II): Date:

Mean High Water Location (III) (State date and method of location): 1953, date of photography;
Supplemented by field inspection in 1957. *REFER TO PAGES 6 & 6A*

Projection and Grids ruled by (IV): A. Riley Date: 2/15/56

Projection and Grids checked by (IV): A. Riley Date: 2/15/56

Control plotted by (III): J. E. Tolodziecki Date: 1/23/56
L. A. Senasack 1/14/57

Control checked by (III): A. Queen Date: 1/25/56
1/15/57

Radial Plot or Stereoscopic *4 APRIL 1956 **
~~CONTROL CHECKED~~ by (III): E. L. Williams Date: 1/29/57

Planimetry Date:

Stereoscopic Instrument compilation (III):
Contours Date:

Manuscript delineated by (III): R. M. Whitson Date: 9/13/57

Photogrammetric Office Review by (III): R. Glaser Date: 9/24/57

Elevations on Manuscript
checked by (II) (III): Date:

** REFER TO PAGES 6 & 6A*

Camera (kind or source) (III): **Nine-lens**

PHOTOGRAPHS (III)				
Number	Date	Time	Scale	Stage of Tide
41599	8/22/53	1233	1:10,000	8.7' above MLLW
41636 thru 41639	"	1257	"	8.2 " "
41649 thru 41651	"	1313	"	8.1 " "

Tide (III)
From Predicted Tide Tables

Reference Station: **Sitka, Alaska**
 Subordinate Station: **Cyrus Cove**
 Subordinate Station:

Ratio of Ranges	Mean Range	Spring Range
	7.7	9.9
	8.8	10.9

Washington Office Review by (IV) *Leo F. Boegnet, Atlantic Marine Center* Date: *Dec. 1968*

Final Drafting by (IV): Date:

Drafting verified for reproduction by (IV): Date:

Proof Edit by (IV): Date:

Land Area (Sq. Statute Miles) (III):
 Shoreline (More than 200 meters to opposite shore) (III):
 Shoreline (Less than 200 meters to opposite shore) (III):
 Control Leveling - Miles (II):
 Number of Triangulation Stations searched for (II): **5**
 Number of BMs searched for (II):
 Number of Recoverable Photo Stations established (III): **1**
 Number of Temporary Photo Hydro Stations established (III): **1**

Recovered: **4** Identified: **4**
 Recovered: Identified:

Remarks:

↓
1957 STATION "Rut" - Not shown on registered map. Refer to pages 6 on 6A
568

T-10385

COMPILATION RECORD	COMPLETION DATE	REMARKS
COMPILED (INCOMPLETE) * Compiled (ADVANCE)	1956 Sept. 1957	LOST
Final Review	Dec. 1968	

* INCOMPLETE MANUSCRIPT REVIEWED FOR REGISTRATION.
REFER TO PAGE 686A.

SHORELINE MAPPING PROJECT PH- 87

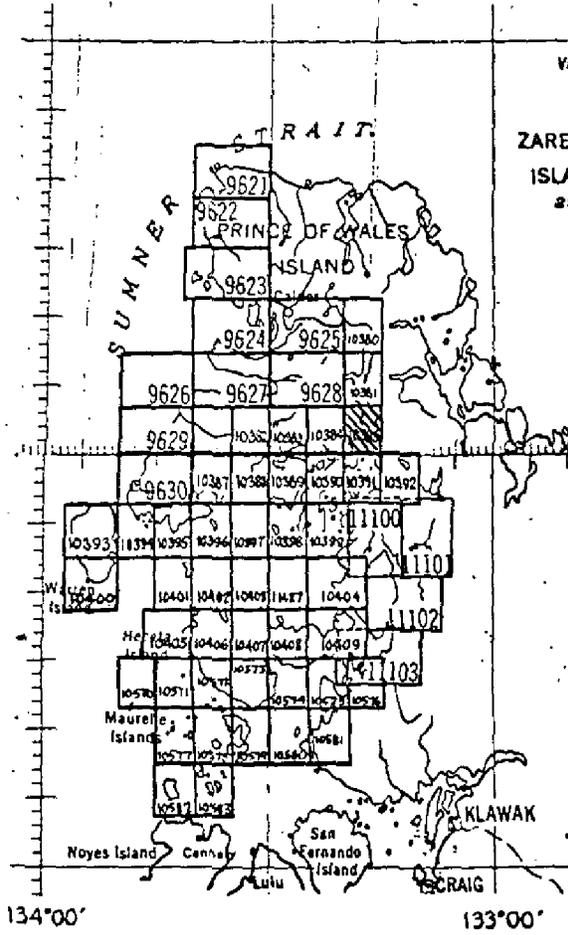
Prince of Wales Island, Alaska

5

56°30'

56°00'

55°30'



Project Ph-87 Official Mileage for Cost Accounts

Sheet No.	Area Sq. Mi.	Lin. Mi. Shoreline
9621	12	10
9622	16	11
9623	15	7
9624	17	12
9625	21	11
9626	4	5
9627	15	15
9628	14	2
9629	5	6
9630	7	6
11100	32	16
11101	9	8
11102	18	10
11103	16	15
10380	6	4
10381	5	10
10382	8	2
10383	6	8
10384	7	5
10385	4	8
10386	9	1
10387	6	7
10388	3	6
10389	7	12
10390	6	16
10391	4	12
10392	8	7
10393	12	10
10394	2	4
10395	5	8
10396	2	4
10397	1	1
10398	3	5
10399	4	11
10400	6	8
10401	1	2
10402	2	3
10403	3	6
11427	1	1
10404	5	10
10405	2	2
10406	8	1
10407	8	2
10408	5	7
10409	10	10

10570	1	1
10571	1	1
10572	5	6
10573	8	2
10574	3	4
10575	2	4
10576	7	2
10577	1	1
10578	2	2
10579	1	6
10580	2	2
10581	12	9
10582	2	6
10583	2	5

TOTAL 432 378

AS DISCUSSED ON PAGE 6 THE ADVANCE MANUSCRIPT FOR THIS MAP WAS LOST. THE INCOMPLETE MANUSCRIPT HAS BEEN REVIEWED AND FORWARDED FOR REGISTRATION.

RECORDS —

RECORDS FOR THIS SURVEY WERE FOUND TO BE INCOMPLETE AT THE TIME OF FINAL REVIEW. EXISTING RECORDS ARE CONTRADICTORY.

ALTHOUGH REPLOTTING WAS RECOMMENDED THROUGH THE PRELIMINARY RADIAL PLOT REPORT, THE ADVANCE MANUSCRIPT MAY HAVE BEEN BASED ON THE PRELIMINARY PLOT ASSEMBLED IN 1956. RADIAL PLOTTING SUBSEQUENT TO THE PRELIMINARY PLOT IS INDIRECTLY ACCOUNTED FOR THROUGH THE STATEMENT "SEE SUPPLEMENTAL PHOTOGRAMMETRIC PLOT REPORT", INCLUDED UNDER HEADING 40, PAGE 19 OF THIS REPORT.

THE ONLY SUPPLEMENTARY PLOT REPORT FOUND IS CONCERNED WITH OTHER MAPS.

NO DATUM PROBLEMS WERE DISCUSSED IN THE FIELD INSPECTION REPORT.

REFER THE FINAL REVIEW REPORT (HEADING 64, PAGE 22) CONCERNING COMPARISON WITH CONTEMPORARY SURVEY H-7987.

JHB

SUMMARY TO ACCOMPANY
DESCRIPTIVE REPORT T-10385

Shoreline survey T-10385 is one of 58 similar surveys in project PH-87. It covers part of El Capitan Passage north of Tenass Island. The primary purpose of the survey was to provide new shoreline for nautical charts and photo-hydro support data for hydrographic surveys.

This survey was compiled as an Incomplete Manuscript. According to the data in the Descriptive Report the survey was field inspected in June 1958. The manuscript was then corrected from the field inspection notes. See page 18 of the compilation report. The original manuscript was not received with the final review data for this project. The cronaflex copy of the manuscript which had been used for photo-hydro support was received. This was classified as an Incomplete Manuscript and bare no evidence of ever having been corrected from field inspection notes. All field photographs had become lost prior to final review.

The manuscript was a vinylite sheet 3 3/4 minutes in latitude by 5 minutes in longitude which was smooth drafted and reproduced on cronaflex. One cronaflex positive and one negative are forwarded for record and registry.

See Page GA
←

1957

2. AREAL FIELD INSPECTION

The southern part of El Capitan Passage is an ill defined and broken waterway that is used by fishermen, gyppo logging outfits and the packet vessels that tend the Tokeen Ice and Cold Storage Company.

Tokeen, located on the west side of El Capitan Island, is the only habitation in the area.

Camp Taylor is in complete ruins.

A trapper's cabin and fur shed are located on a small high water islet, on the southeast side of San Island.

Two Indian cabins are located on the westernmost of the Kassin Islands.

Rock outcroppings are metamorphic limestones and shales and are covered by a black scale at and above mean high water, for a vertical span of from 2 to 4 feet.

Densities and tones were not, in general, inspected inshore of the storm high water line.

Shoal and kelp areas were noted, where discernible, on the photographs.

3. HORIZONTAL CONTROL

(a) TAY 2, 1957 was established on the sight of lost station TAY, 1922.

(b) The 1956 identification of Burnt Island Light was in error. It was reidentified and a Control Station Identification Card submitted.

4. VERTICAL CONTROL

Inapplicable.

5. CONTOURS AND DRAINAGE

Contours - inapplicable.

Within the limits of this survey there are a number of perennial streams

the more important of which have been noted on the photographs.

6. WOODLAND COVER

All land areas not covered by storm high water and densely forested with the exception of muskegs, logged areas, and the higher mountains.

Conifers - hemlocks, spruce and cedar, comprise the major portion of the cover, with the cedars favoring low wet areas.

Many small logging operations have been conducted in this area and though they span a number of years all but the oldest are well defined.

Scattered patches of alder and crab apple can be found along the beaches, and show as a dark globular mass against the lighter conifers.

7. SHORELINE AND ALONGSHORE FEATURES

The shoreline was inspected from the beach at all photo-hydro signals locations and from the boat in all other areas.

- (a) The office interpretation of the mean high water line was, in general, quite accurate, even in the heavily shadowed areas. In all the large areas of shadowed shore, the mean high water line was located by sextant angles taken to photo-hydro signals. The angles were recorded on the back of the photographs. In the smaller areas the shoreline was readily discernable and was delineated directly on the photographs.
- (b) The low water line corresponds closely with the darker color tone at the offshore edge of alongshore and offshore features.
- (c) The foreshore consist of rock outcrops and boulders, with exception of deltaic muds and gravels at the mouths of the larger streams.
- (d) There are no noteworthy bluffs or cliffs.
- (e) A detailed schematic was made of Tokeen Ice and Cold Storage Company's piers and floats, and a copy was placed on the back

of photo 41531 (wing).

The float shown in the first cove north of Tokeen still exists though, it is in poor condition. The float house that was tied to the northeast end of the float has been moved.

8. OFFSHORE FEATURES

All offshore features were visited. All shoal and foul areas were indicated on the photographs.

Visible rocks were indicated and their heights or depths, times and dates were noted.

All rocks not visible on the photographs were located by sextant angles to photo-hydro signals. The fixes were recorded on the back of the photos along with the height or depths, times, and dates.

9. LANDMARKS AND AIDS

Landmarks - none.

Within the limits of this survey there are two fixed and one floating aid to navigation. They are:

E1 Capitan Passage Buoy No. 1
Burnt Island Light
Hub Rock Marker

10. BOUNDRIES, MONUMENTS

Inapplicable.

11. OTHER CONTROL

Many marked hydrographic stations from the 1922 survey were recovered and located on the photographs, thereby, exceeding the required spacing for recoverable topographic stations.

One new station, PYRE 1957 was established on the sight of a concrete monument of unknown origin.

The following is a list of recoverable topographic stations:

<u>NAME</u>	<u>MANUSCRIPT</u>
RIT 1922	T-10384-5
BY 1922	T-10385
LOW 1922	T-10390
TRIP 1922	"
LIK 1922	T-10391
GEE 1922	"
IF 1922	"
PIE 1922	"
MOC 1922	"
BOX 1922	"
BOT 1922	"
FAT 1922	"
RUT 1922	"
CHET 1922	"
LOT 1922	"
BIG 1922	"
PYRE 1957	"
RUB 1922	"
NOME 1922	(This station was known as NOME on 1922 survey H-4330 but was called BUG on H-4329.)
REEF 1922	T-10391
ROZ 1922	T-10399
BUD 1922	"
SLIM 1922	"
EX 1922	"
MOO 1922	"
HEEL 1922	"
WAS 1922	"
BI 1922	"
PASS 1922	"

13. GEOGRAPHIC NAMES

Geographic names will be covered in a separate report.

14. SPECIAL REPORTS AND SUPPLEMENTAL DATA

a. Forwarded to the Director:

1. Tidal Data, El Capitan Tide Gage via transmittal letter 11 July.
2. Tidal Data, Tokeen Gage via transmittal letter 3 Aug.
3. Nine Lens Field and Office Photographs, scale 1:10,000 via transmittal letter 28 July.
4. Blackline impressions via transmittal letter 28 July.
5. Control Station Identification Cards via transmittal letter 10 Aug.
6. Boat Sheet HO-1257 via transmittal letter 28 July.

b. Forwarded with this report:

1. Control Station Identification Cards.
2. Descriptions of Recoverable Topographic Stations.
3. Nine lens field and office photographs, Scale 1:10,000.
4. Blackline impressions.

c. To be forwarded to the Director:

1. Hydrographic Sheet HO-1357.
2. Descriptive Reports HO-1257 and HO-1357.
3. Description of Triangulation Stations.
4. Geographic Names Report.
5. Coast Pilot Notes.

Respectfully submitted,

James P. Randall
James P. Randall
LTJG, C&GS

Approved and forwarded:

E. W. Richards

E. W. Richards,
LCDR, C&GS
Comdg., Ship HODGSON

PRELIMINARY PHOTOGRAMMETRIC PLOT REPORT

Project 6087

Surveys T-10383 thru T-10385,
T-10389 thru T-10391,
T-10397, T-10398, T-10399, T-11100,
and T-11427

A FEW FIELD
IDENTIFIED STATIONS
WERE USED IN
PLOT

21. AREA COVERED

This preliminary radial plot covers the area of the surveys listed above.

The geographic area encompassed by these shoreline surveys includes Token Bay on the north, Davidson Inlet on the west, El Capitan Passage on the east, and Sea Otter Sound on the south.

22. METHOD - RADIAL PLOT

Map Manuscripts:

Vinylite sheets with polyconic projections in black and U.T.M. Alaska grid in red at a scale of 1:10,000 were furnished by the Washington Office.

All control stations and substitute stations were plotted using the meter bar and beam compass.

Base sheets were prepared in this office.

A sketch showing the layout of surveys and distribution of control and photograph centers is attached to this report.

Photographs:

There are forty-six (46) nine-lens, unmounted photographs at a scale of 1:10,000 used in this plot, numbered as follows:

- 41483 thru 41490
- 41514 thru 41521
- 41529 thru 41537
- 41594 thru 41602
- 41637 thru 41641
- 41648 thru 41652
- 52034 and 52035

Templets:

Vinylite templets were made for all the photographs using a master templet to correct for errors due to paper distortion and chamber displacement.

Closure and Adjustment to Control:

This radial plot is an extension to the east of the plot for surveys T-9629, T-9630, T-10328, T-10383, T-10388, T-10393 thru T-10396, T-10400, and T-10401. Although much dependence had to be placed on the office-identified control throughout the plot, it was possible to effect a

Closure and Adjustment to Control: (cont'd)

bridge from field-identified control on surveys T-10383 and T-10389 in the northwest to field-identified control on survey T-11100 in the southeast corner of the plot. This is a somewhat lengthy bridge and additional field-identified control is essential in order to ensure attaining the horizontal accuracy requirements, particularly on surveys T-10304 and T-10385.

A comparison between the radially plotted positions of the office-identified control and the geographic positions indicates that the probable horizontal error does not exceed 1.0 mm in the weakest portions of the plot.

Transfer of Points:

Each map manuscript was placed over the finished plot, oriented, and the positions of all pass points and photograph centers were then pricked on the manuscript.

Of these manuscripts, only surveys T-10383, T-10389, T-10396, and T-11127 were inked and passed on to the compilers. The pass points and photograph centers on the other surveys were not inked. Unless further instructions are received from the Washington office, these surveys numbered T-10304, T-10385, T-10386, T-10390, and T-10391 will not be inked or compiled until field identified control is available and the plot is relaid.

23. ADEQUACY OF CONTROL

This was a preliminary radial plot based for the most part on office-identified control. A layout on which is indicated the control stations which should be identified was submitted to the field party. With these stations identified, there should be adequate control for a final radial plot.

24. SUPPLEMENTAL DATA

None.

25. PHOTOGRAPHY

The photographic coverage and definition of photographs used in this plot were good.

26. CONTROL STATION OFFICE NOTES

A cahier numbered "No. 2 of 2" containing a card for each office-identified station within the limits of this plot was submitted to the field party. These cards should aid the field man in recovering and identifying the triangulation stations. On each card is a sketch of the area near the probable location of the station, as well as photographic data and the published description.

H 14

25. CONTROL STATION OFFICE NOTES (cont'd)

The sketch on the card is generalized. A sketch made by the field man while at the station site is preferred.

Respectfully submitted
4 April 1956

E. L. Williams
E. L. Williams
Carto. (Photo.)

COMPILATION REPORT * SEE BELOW
Project Ph-87
T-10385

The Photogrammetric Plot Report is a part of Descriptive Report, ^{This}
T-10382 thru T-10384.

31. DELINEATION

This map manuscript was delineated by graphic methods. Shoreline and offshore details were interpreted in the office on nine-lens photographs and verified or corrected by field inspection during hydrographic survey work. (1957)

32. CONTROL

Horizontal control was adequate.

33. SUPPLEMENTAL DATA

A copy of Boat Sheet HO-1257 was available for comparison.

34. CONTOURS AND DRAINAGE

Contours - inapplicable.
Drainage - No comment.

35. SHORELINE AND ALONGSHORE DETAILS

The shoreline was inspected at places where it was obscured by shadows and where necessary to correct the office interpretation.

Low water lines were field inspected.

36. OFFSHORE DETAILS

Foul lines were inspected by the hydrographic party. Sextant fixes were obtained for rocks which were not visible on the photographs.

37. LANDMARKS AND AIDS

None.

* THIS REPORT DOES NOT PERTAIN TO THE
MAP TO BE REGISTERED - REFER TO
PAGES G & G A.

38. CONTROL FOR FUTURE SURVEYS

A form 524 is being submitted for one recoverable topographic station. One signal, LUX, used as an azimuth for establishing this station, was plotted on the manuscript.

39. JUNCTIONS

Junctions have been made with T-10381 to the north, T-10384 to the west and T-10391 to the south. There is no contemporary survey to the east.

40. HORIZONTAL AND VERTICAL ACCURACY

See supplementary photogrammetric plot report.

41. - 45.

Inapplicable.

46. COMPARISON WITH EXISTING MAPS

None are available.

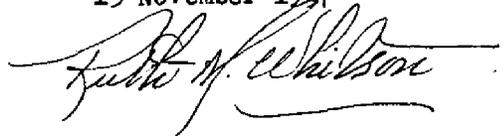
47. COMPARISON WITH NAUTICAL CHARTS

Chart 8171, 5th edition, dated 9 January 1956.
Chart 8172, 3rd edition, dated 19 March 1956.

Items to be applied to nautical charts immediately: None.

Items to be carried forward: None.

Respectfully submitted
15 November 1957



Ruth M. Whitson,
Carto. Photo. Aid

Approved and forwarded

William F. Deane
William F. Deane,
CDR C&GS
Baltimore District Officer

GEOGRAPHIC NAMES

FINAL NAME SHEET

PH-87 (Sumner Strait, Alaska)

T-10385

Camp Taylor

El Capitan Passage

Kosciusko Bay

Kosciusko Island

Prince of Wales Island

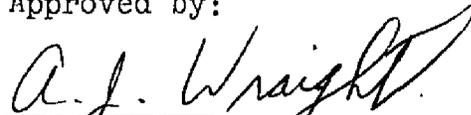
Sarheen Cove

Spanberg Island

Tenass Island

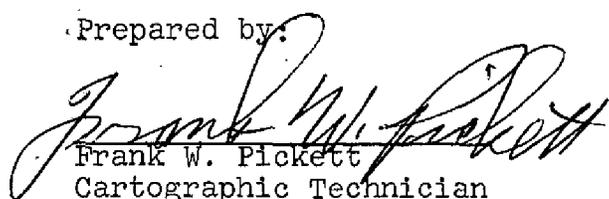
Tenass Pass

Approved by:



A. Joseph Wraight
Chief Geographer

Prepared by:



Frank W. Pickett
Cartographic Technician

T-10385

49. NOTES FOR THE HYDROGRAPHER

One recoverable topographic station, RUT (1922), 1957 and one photo-hydro station, LUX, were established.

REVIEW REPORT T-10385
SHORELINE
DECEMBER 10, 1968

61. GENERAL STATEMENT:

See Summary accompanying the Descriptive Report.

There is no field edit sheet or field edit report for this survey.

62. COMPARISON WITH REGISTERED TOPOGRAPHIC SURVEYS:

Comparison was made with copies of Registered Survey No. 4011, 1:10,000 scale made in 1922 and No. 4053, 1:10,000 scale made in 1922-1923. The shoreline of these two surveys is not in good agreement with the shoreline of T-10385.

Shoreline survey T-10385 supersedes the two older surveys for nautical chart construction purposes.

63. COMPARISON WITH MAPS OF OTHER AGENCIES:

Comparison was made with USGS PETERSEBURG (A-4), ALASKA, 15 x 20 minute 1:63,360 scale quadrangle, edition of 1949 with minor revisions in 1964. The two surveys are in good general agreement, the quadrangle being somewhat generalized because of its scale.

64. COMPARISON WITH CONTEMPORARY HYDROGRAPHIC SURVEYS:

Comparison was made with a copy of reviewed survey H-7987. The shoreline of these two surveys is in good agreement. It does not appear that the hydrographer made any corrections to the MHWL on the hydrographic survey. The rocks on the hydrographic survey that are not visible on the photographs of the area have been indicated on the comparison print which is bound with this report.

65. COMPARISON WITH NAUTICAL CHARTS:

Comparison was made with charts 8171, 8th edition, June 10, 1968 and 8172, 5th edition November 23, 1964. It was noted that the shoreline of chart 8172 is not in good agreement with the shoreline of T-10385. There appears to be a difference in datum.

In addition to the rocks on the hydrographic survey, rocks appearing on the chart that are neither on the hydrographic survey, ^{nor} on survey T-10385 and are not visible on the photographs have been indicated on the comparison print.

66. ADEQUACY OF RESULTS AND FUTURE SURVEYS:

This survey complies with project instructions and meets ~~*~~ the National Standards of Map Accuracy.

Office photographs 41637 thru 41639 and 41649 thru 41651 were used during final review. All rocks located by the hydrographer were searched for on these photographs.

Approved by:

Reviewed by:

Howard S. Cole
Howard S. Cole, CAPT USESSA
Director, Atlantic Marine Center

Leo F. Beugnet
Leo F. Beugnet

Approved by:

Everett S. Plawey
Chief, Photogrammetric Branch *AB*

R. H. Houlton
Chief, Photogrammetry Division

Chief, Nautical Chart Division

*THIS IS AN "INCOMPLETE" SURVEY. REFER
TO PAGES 6A OF THIS REPORT
&
6* *SIG A*